Wildlife Tracks®

A Publication of The Humane Society of the United States and The HSUS Wildlife Land Trust *Volume 9, Number 1, Fall, 2005*

Close Encounters of the Coyote Kind

Camilla H. Fox,
Animal Protection Institute

This article is adapted from an article written by Camilla H. Fox, Director of Wildlife Programs for the Animal Protection Institute for API's quarterly magazine Animal Issues. *For more information about coyotes and API, please see: www.api4animals.org and www.BanCruelTraps.com*

The call that API received in the spring of 2004 started out like many of the others that we receive on a weekly basis: A suburban community was experiencing an increase in sightings of and encounters with coyotes. The resident who called us was concerned that local officials would advocate lethal control over more humane approaches to coexisting with the wild canids.

But one thing was unique about this community's situation. The city involved was Glendale, a Los Angeles suburb tucked up against the foothills where, 23 years ago, a coyote killed a 3-year-old girl—the only human fatality from a coyote ever recorded. Unfortunately, but not surprisingly, that tragedy was linked to the feeding of coyotes by area residents.

Glendale has a long history of struggling with coyote encounters, and had taken a number of significant steps—some positive, some negative—after the 1981 tragedy to mitigate conflicts. On the heels of the girl's death, to appease those who called for the eradication of coyotes from Glendale, the local government initiated a reactionary and ultimately ineffective campaign to trap and kill dozens of coyotes in and around the city. When this effort failed to suppress the coyote population over the long term, some officials and residents called for a more proactive response.

Glendale is distributing API's brochure, "Humane Ways to Live with Coyotes," and is increasing its public outreach efforts through community seminars and educational programs. Photo: Courtesy of Camilla Fox

The city then implemented a public outreach campaign to educate residents about how to coexist with coyotes and avoid negative encounters. For a time, anyone who contacted the city with an inquiry about coyotes was sent a detailed packet containing information on coyote biology, ecology, and methods for deterring conflicts. In 1981, recognizing the need to decrease the habituation of coyotes to human food sources, the Glendale City Council passed an ordinance prohibiting the feeding of companion animals outside after 10:00 p.m.

A combination of factors, however, including a lack of enforcement of the city feeding ordinance, a gradual reduction in proactive community outreach efforts, and an increase in urban sprawl, led over time to a rise in coyote encounters within the city of Glendale.

The impetus for the recent phone call to API was a decision by the Glendale City Council to increase efforts to kill coyotes within and around the town. The council's decision was largely a response to the ardent testimonials of a feral cat colony caretaker who had lost some of her cats to coyotes. This testimony, combined with fear-mongering news reports warning that "children would

be next," resulted in the city council voting to double the amount of money allocated to killing coyotes. The council earmarked $24,000 for killing coyotes, but only $4,000 toward increased public education and better enforcement of the feeding ordinance.

API strives to help individuals and communities find humane, non-lethal methods of resolving conflicts between humans and wildlife. We believe that Glendale City Council's actions went against everything that this and surrounding communities should have learned from previous encounters with coyotes.

Notably, the council failed to heed the recommendations of a detailed 1983 study on coyotes in the neighboring town of South Pasadena, a community that had also experienced an increase in coyote encounters. The study—carried out by a task force appointed by the mayor of South Pasadena—was one of the most comprehensive and well-researched community-based studies on coyotes ever written. It remains relevant to this day.

In South Pasadena, the study led to the appointment of a permanent city Animal Commission that focuses largely on public outreach efforts regarding wildlife conflict mitigation. The members of the Glendale City Council seemed not to have familiarized themselves with this seminal report. If they had, it is unlikely that they would have opted to support the increased trapping of coyotes, a method South Pasadena's report strongly recommended against, deeming it non-selective, cruel, and a danger to "non-target animals as well as to humans" that "could lead to lawsuits against public officials."

In addition to failing to heed the recommendations of the South Pasadena study, the Glendale government consistently failed to enforce its own 1981 city ordinance prohibiting the feeding of animals outside at night. According to a source in the Glendale Police Department, as of April 2004, no citation had ever been issued by the city, even though both police and humane society officials acknowledged that people in the area continue to feed coyotes and other animals, both intentionally and unintentionally. Furthermore, the city had underfunded its public education outreach efforts and was no longer distributing the detailed coyote education packet once sent to area residents.

API and other animal advocates have appealed to Glendale's mayor and city council to rethink their decision to kill coyotes and to focus limited resources on increased public education, outreach, and enforcement of the feeding ban—methods shown to be much more effective than trapping in mitigating coyote conflicts.

At press time, the city manager's office informed API that Glendale is distributing API's brochure, "Humane Ways to Live with Coyotes," and is increasing its public outreach efforts through community seminars and educational programs.

This Land Is Their Land

The current clash in Glendale is just one recent chapter in a long history of conflict between humans and coyotes.

European explorers first encountered coyotes in the Great Plains region of North America. Because of human-wrought changes to the environment, as well as the near-extirpation of the gray wolf, coyotes have expanded their range three-fold since the mid-1850s. Coyotes now live in every U.S. state except Hawaii, as well as in much of Canada. They have been spotted cruising the streets of Los Angeles, eating watermelon in Texas, and even perusing the partly paved environs of New York City's Central Park. That coyotes are found in such a wide variety of landscapes is a testament to their ability to survive and even thrive on whatever food is available. As an opportunistic predator, coyotes eat almost anything: from rats, mice, voles, moles, rabbits, and ground squirrels to insects, lizards, frogs, nuts, and fruit.

While urban sprawl and development often sound a death knell for many wild creatures, the growth in such humanized landscapes has actually worked to the coyote's advantage. The suburban patchwork of wooded and open areas offers an abundance of "edge" habitat, which the coyote is adept at exploiting. Here, coyotes and other wild animals find plentiful sources of food, water, and shelter. Unsecured garbage, pet food, free-roaming cats and small dogs, rodents, and fruit trees all attract coyotes, who can quickly adapt to the human-modified environment. This high density of food sources allows coyotes to fulfill their nutritional requirements within a much smaller area than in their natural habitat.

With increased coyote density in urbanized areas come increased interactions with people. The vast majority of these encounters are merely sightings, and most people are unaware that there are coyotes in their midst, as coyotes generally tend to keep a low profile and avoid humans. Coyotes may, however, prey on cats and small dogs, since these companion animals are similar in size to their natural prey. Although very rare, attacks on people have occurred, primarily when coyotes have become habituated

Traditional, federally subsidized coyote control programs have failed to mitigate conflicts over the long term. Photo: Dick Randall, HSUS

to the presence of humans and begin to associate people directly with food.

While most people welcome the opportunity to see a wild coyote, some respond with fear and prefer that wild animals stay as far away from their communities as possible. Unfortunately, it is often those who want coyotes out of their communities who are the most vocal. The public response to coyotes is frequently knee-jerk and shortsighted, as it was in Glendale, where the faulty assumption was made that killing the coyotes would provide a lasting solution.

Although such "Band-Aid" approaches allow public officials to tell the public that they are "doing something" about the situation, the effectiveness of programs that emphasize lethal control is short-lived, at best. The reasons for this are largely attributable to the well-documented ability of coyote populations to quickly rebound after heavy lethal control efforts.

On the East Coast of the United States, where white-tailed deer are abundant, coyotes sometimes prey on fawns (which can help keep deer populations in check) and scavenge deer carcasses; in agricultural areas, they can kill unprotected domestic livestock such as sheep and poultry, particularly when their natural prey has been reduced or eliminated by human activities. In general, however, small rodents and cottontail rabbits comprise the primary base of the coyote's diet. This can be a benefit to communities; coyotes help keep such species' populations in balance, offering free rodent control services to farmers and suburban neighborhoods.

In addition, coyotes help regulate meso-carnivore populations (meso-carnivores are smaller or mid-sized predators such as red foxes, raccoons, opossums, and skunks). In an important study conducted in coastal southern California, the presence or absence of coyotes in patches of sage-scrub habitat was found to control directly the distribution and abundance of smaller carnivores, which in turn altered scrub-breeding bird communities.[1] Similar findings involving coyotes have been made elsewhere in North America, revealing both direct and indirect effects on waterfowl, songbirds, and rodents.[2] So, in addition to rodent control services, coyotes can help maintain healthy ecosystems and avian diversity by keeping bird-eating predators in check.

This shocking photo of 25 coyotes, killed and strung up along a fence as a deterrent, documents a Texas ranch's response to coyote presence. Photo: Courtesy of Amanda Barber

Learning Coyotes' Language

To date, few studies have analyzed the dynamics of coyote populations in urban and suburban areas. What studies have been conducted shed some light on how coyotes are able to exploit densely populated human settlements.

Research has shown that coyotes living in urbanized areas tend to adjust behaviorally to habitat fragmentation and human activities.[3] This means that coyotes try to avoid human activities by hunting more at night and at dawn and dusk (although seeing coyotes in the day should not be cause for alarm, as this, too, is perfectly normal behavior). Urban coyotes may favor residential habitats over commercial and vacant areas because of the diversity of vegetation, abundance of prey, and availability of cover in residential neighborhoods.[4]

In the wild, a coyote's home range averages 10 square kilometers, while in the suburbs, home ranges can be as small as 0.5 square kilometers or as large as 40 square kilometers.[5] Overlapping pack territories, and the resultant decreased need to defend territories, allow a greater number of coyotes to occupy an area.

While some scientists have speculated that coyotes live as solitary individuals or in pairs in urbanized areas, research has shown that coyotes may live in packs, especially if sufficient open space or natural areas are available that allow for little interaction with humans.

One study in Cook County, Illinois, found a number of coyote packs living successfully in a relatively small (8 square miles) forest preserve, just outside Chicago O'Hare International Airport.[6] Although the Busse Woods preserve is surrounded by developments and roads, the coyotes studied were thriving and successfully exploiting the fragmented communities surrounding the airport. One coyote, a yearling female, who was live-captured within the preserve and radio-collared, was found to have a remarkable 25-square-mile home range that covered at least five municipalities and consisted of heavily developed areas and busy roads.

This research, along with similar studies conducted in Tucson and Seattle, has shown that solitary coyotes—also known as transients or "nomads"—may have very large home ranges in urbanized areas, ranging from 3.9 to 15.4 square miles. Many of these coyotes regularly traverse large interstates, shopping malls, and parking lots, as well as small and large patches of natural habitat. While some coyotes are savvy enough to survive the many dangers posed by urbanization, mortality from automobile collisions is high and may account for up to 50 percent of coyote deaths in urbanized areas.[7]

Because one coyote can make 11 different vocalizations, the howling of a few is often mistaken for that of many, particularly during mating season, from December through February. It is no surprise that there are more reports of coyotes during this time. In addition, when pups are born, generally in April or May, the parents may become more mobile (in search of food to provision their young) and more aggressive toward people and dogs when defending their dens.

The results of these existing studies, along with further research into the

Proactive Approaches to Coexisting with Coyotes

The Animal Protection Institute is pleased to announce the publication of *Coyotes in Our Midst: Coexisting with an Adaptable and Resilient Carnivore*—a comprehensive report on non-lethal approaches to conflicts between humans and coyotes in both urban and rural areas.

Outlining proactive measures for managing conflicts, *Coyotes in Our Midst* is a call to action for land and homeowners, ranchers, policymakers, and communities. The pages within analyze a wide array of practical and proven techniques—from livestock guard dogs to motion-activated scare devices—that, when used correctly and especially in combination, can significantly reduce, if not eliminate, negative interactions between coyotes and humans.

In addition to presenting a comprehensive review of humane methods of addressing conflicts, *Coyotes in Our Midst* provides information on the biological and ecological importance of coyotes, as well as an historical overview of coyote management in the United States and a perspective on why traditional, federally-subsidized coyote control programs have failed to mitigate conflicts over the long term. Also covered in this publication:

- Alternative Strategies for Managing Livestock Conflicts with Coyotes
- Community Approaches to Conflicts
- Conflicts with Coyotes at the Urban/Wildlands Interface
- How to Create an Urban Coyote Coexistence Program
- State Classification and Management of Coyotes

Whether the aim is to reduce livestock predation or keep companion animals safe, *Coyotes in Our Midst* provides the information, tools, and additional resources needed to promote peaceful coexistence with this adaptable, resilient, and resourceful predator.

To order a copy of *Coyotes in Our Midst,* visit the Animal Protection Institute's website at www.api4animals.org or call (800) 348-7387.

In addition to rodent control services, coyotes can help maintain healthy ecosystems and avian diversity by keeping bird-eating predators in check.

behavior of coyotes in urbanized areas, have implications for community planning, transportation, development, and conservation efforts. By increasing our knowledge and understanding of this intelligent species, we can help support the development of effective and humane approaches to human-coyote conflicts, and can ensure a future in which humans and wild animals can live together more peacefully.

Educated Co-Existence

There are many reasons why lethal control—whether in urbanized or agricultural areas—does not provide a long-term solution to conflicts with coyotes.

Unlike wolves, grizzly bears, mountain lions, and other large carnivores, coyote populations are able to rebound when their numbers are depleted. For example, given adequate habitat and prey, female coyotes can increase their litter sizes and pup survival may also increase. In addition, transient coyotes from surrounding regions frequently move in to fill vacant territories. In fact, studies have shown that to suppress a coyote population in a given area over the long term, 70–90 percent of the coyotes would need to be removed continually. Wildlife managers have found this an untenable bar and are becoming increasingly aware that lethal control simply does not work with a species as adaptable and resilient as the coyote.

So what is the solution when coyotes become a "nuisance" and start killing neighborhood cats and wreaking havoc in garbage cans, compost piles, and bird feeders?

It is critical that community leaders and residents examine the source of the problem. Often, human-coyote conflicts in urbanized areas result from people intentionally or unintentionally providing coyotes (and other wild animals) with food. Solutions can frequently be found in simple alterations of human behavior:

- Securing garbage cans;
- Putting garbage out the morning of scheduled pick-up instead of the night before;
- Bringing in the dog and cat food—as well as the dogs and cats themselves—at night (API advocates keeping cats indoors both for the cat's protection and to protect birds and other prey species);
- Picking up fallen fruit (coyotes eat fruit!);
- Cleaning up compost piles and keeping them tightly secured
- Ensuring that bird feeders don't

Because one coyote can make 11 different vocalizations, the howling of a few is often mistaken for that of many, particularly during mating season.

overflow (coyotes are attracted to both the bird seed and the birds and rodents attracted to the birdseed!)
- Landscaping to reduce hiding and denning areas,
- Keeping a "clean house" and a clean neighborhood

Coyotes are smart, and they can become habituated easily to human environments. Therefore, in addition to removing the things that will attract coyotes, we must use ingenuity when trying to outsmart this intelligent and adaptable animal. For example, motion-activated sprinkler systems can help keep coyotes (and other unwanted wildlife) out of gardens, while beating the coyote at his ability to adapt to static deterrents.

Time and again, coyotes have proven themselves remarkably resilient animals; it's little wonder that the Navajo called this cunning and resourceful species "God's Dog." If we're smart, we'll recognize that coyotes have much to offer us, not only by keeping ecosystems healthy and diverse but also by providing inspiring examples of ingenuity and adaptability in an ever-changing world.

(Endnotes)

[1] Crooks, K. R. and M. E. Soulé. 1999. "Mesopredator release and avifaunal extinctions in a fragmented system." *Nature* 400:563–66.

[2] Rogers, C. M. and M. J. Caro. 1998. "Song sparrows, top carnivores and nest predation: A test of the mesopredator release hypothesis." *Oecologia* 116:227–33; Henke, S. E. and F. C. Bryant. 1999. "Effects of coyote removal on the faunal community in western Texas." *Journal of Wildlife Management* 63:1066–81; Sovada, M. A., A. B. Sargeant, and J. W. Grier. 1995. "Differential effects of coyotes and red foxes on duck nest success." *Journal of Wildlife Management* 59:1–9.

[3] Tigas, A. L., D. H. Van Vuren, and R. M. Sauvajot. 2002. "Behavioral responses of bobcats and coyotes to habitat fragmentation and corridors in an urban environment." *Biological Conservation* 108(3):299–306.

[4] Grinder, M. I., and P. R. Krausman. 1998. "Ecology and management of coyotes in Tucson, Arizona." *Proc. 18th Vertebr. Pest Conf.,* 293–98.

[5] Shargo, E. S. 1998. "Home range, movements, and activity patterns of coyotes *(Canis latrans)* in Los Angeles suburbs." Ph.D. dissertation, University of California, Los Angeles, Gehrt, S. 2004. "Chicago Coyotes." *W.C.T.* May/June 2004, 24–26.

[6] Gehrt, op. cit.

[7] Tigas, op. cit.

Wildlife Tracks®

Wildlife Tracks Mission and Goals:
Over 5,000 wildlife and habitat protection organizations nationwide are working to stop the rapid disappearance of wildlife and the destruction of their habitat. *Wildlife Tracks* combines the power of information, the power of networking and the power of people to strengthen local, state and national grassroots movements to preserve and restore wildlife and the ecosystems they need for their survival.

Goals:
- To expedite the exchange of experience and information between wildlife and habitat organizations, while increasing the efficiency and effectiveness of their efforts.
- To empower the grassroots by sharing the successful efforts to preserve wildlife and ecosystems and to inspire them to expand their vision and strategy to achieve long-term solutions.
- To assist in building responsible and credible organizations by providing information and guidance.

Staff:
John W. Grandy, *Senior Vice President,* Wildlife Programs, HSUS
Debra Firmani, *Managing Editor*
Tanya Mulford, *Associate Editor*
Andrea Cimino, *Editorial Assistant*
Jenni Haas, *Designer*

Wildlife Tracks Office:
The Humane Society of the United States
Wildlife and Habitat Protection
2100 L Street, NW
Washington DC 20037
Phone: 301-258-3109
Fax: 301-258-3080
E-mail: tracks@hsus.org